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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,869	10/26/2000	Taichi Shino	2000 1452A	2975

7590 05/21/2003  
Wenderoth Lind & Ponack LLP  
2033 K Street NW Suite 800  
Washington, DC 20006

EXAMINER

NGUYEN, CHANH DUY

ART UNIT PAPER NUMBER

2675

DATE MAILED: 05/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/695,869

Applicant(s)

SHINO ET AL.

Examiner

Chanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment including substitute specification filed on February 24, 2003 has been entered and considered by examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16-23, 26-28 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al (U.S. Patent No. 6,288,692) in view of Marcotte (U.S. Patent No. 6,411,035).

As to claim 16, Kanazawa discloses an alternate current plasma display panel including a first insulating substrate and second substrate (i.e., front glass substrate and rear glass substrate) being transparent and disposed facing each other to form a discharge space. Kanazawa teaches a plurality of display electrodes (51, 52) disposed over the first insulating substrate (front glass), each display electrodes including a scan electrode (51) and a sustain electrode (52); see figure 13 and 14. Kanazawa teaches a plurality of data electrodes (53) disposed over the second insulating substrate (rear glass substrate) and being disposed perpendicular to the display electrodes (51 and

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52); see figure 13 and 14. Kanazawa teaches well-known Figures 2-3 having a plurality of phosphors (27) placed along the data electrode and a dielectric layer (24) covering the display electrode as recite in claim. Kanazawa teaches a barrier (58) disposed on the dielectric layer (i.e. dielectric layer 24 referred to Figures 2-3) the barrier extending longitudinally approximately parallel with the display electrodes (51, 52). The only thing different between Kanazawa and the claim 1 is that Kanazawa does not teaches one or more conductor adjoining a respective one of the display electrodes. Marcotte teaches well known feature of one or more conductors (40) adjoining a respective one of the display electrodes (10, 42, 44) (See Figure 3 and see column 2, lines 7-25). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have added a conductor (40) as taught by Marcotte adjoining with display data of Kanazawa so that it provide a larger, brighter and more uniform discharge area than the dual discharge site topology (see column 2, lines 27-36 of Marcotte).

As to claim 26, this claim differs from claim 16 only in that the limitation "each of the conductor is electronically connected to a respective one of the scan electrode and the sustain electrode" is additionally recited. Marcotte clearly teaches the conductor being electronically connected to a respective one of the scan electrode and the sustain electrode (see column 2, lines 7-10).

As to claims 17 and 30-31, Marcotte clearly teaches the conductor being electronically connected to a respective one of the scan electrode and the sustain electrode (see column 2, lines 7-10).

As to claims 18, 20, Marcotte teaches well known feature of one or more conductors (40) adjoining a respective one of the display electrodes (10, 42, 44) (See Figure 3 and see column 2, lines 7-25).

As to claim 19, 21, Figure 4 of Marcotte clearly teaches the claimed "reverse order" as recited in the claim. That is first order: sustain electrode 10, and conductor 40 then reverse order: conductor 40 and scanning electrode 42.

As to claim 22, Kanazawa clearly teaches the barrier (58) beign disposed between adjacent rows (52).

As to claims 23 and 28, photo-absortive material barrier is known in the art, even taught by Kanazawa so as to prevent the light from leak.

As to claim 27, Kanazawa teaches a barrier (58) disposed on the dielectric layer (i.e. dielectric layer 24 referred to Figures 2-3) the barrier extending longitudinally approximately parallel with the display electrodes (51, 52).

3. Claims 24-25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa in view of Marcotte, as applied to claims 16 and 26, and further in view of Yamada (U.S. Patent No. 6,275,203).

As to claims 24-25 and 29, note the discussion of Kanazawa and Marcotte above, Kanazawa and Marcotte discloses an alternate current plasma display panel as recited in claim 1 with exception of describing the limitation "reverse of a polarity" as recited in claims 24-25 and 29. Yamada teaches the voltages applied to the scan electrodes and sustain electrodes being opposite polarity; see figures 6, 19-20 and

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column 10, lines 15-60. Since one of the conductors (40) of Marcotte physically connects to scanning line 42. Thus, at least one of the conductor (40) has the same polarity as the scanning conductor (40) which is opposite polarity of the sustain electrode (10) as modified by Yamada. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the voltages applied to scan and sustain electrodes with opposite polarity as taught by Yamada to the driving circuit of Kanazawa so that an electromagnetic noise generated in the electrodes can be canceled by another.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 16-31 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the reference of Marcotte has been added for new ground rejection.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

CN

C. Nguyen

March 18, 2003

  
CHANH NGUYEN  
PRIMARY EXAMINER